

## Direct Drive CCFL Circuit With Controlled Start-Up Mode

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## ABSTRACT

A CCFL can exhibit different strike characteristics depending on age and temperature. A CCFL in a direct driven CCFL circuit that is difficult to strike can appear to be malfunctioning using a standard start up operation. A controlled start up allows additional opportunities for a slow striking CCFL to strike. In one embodiment, the CCFL of the direct drive CCFL circuit can be initially driven at a switching frequency substantially different than a resonant frequency. Based on certain conditions, the switching frequency can subsequently be allowed to approach resonant frequency in a controlled manner. If the driving frequency reaches the resonant frequency of the CCFL during a set time period, then the CCFL can enter into steady state operation. At this point, the same conditions can be monitored to identify fault conditions in the direct drive CCFL circuit.